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CORNBOK

Dakota Improved Seed Co.
Mitchell, So Dak

Dakota Improved Seed Co.

Mitchell, South Dakota



Ever since the Dakota Improved Seed Company was organized in 1906 the annual catalog published by the company under the name of Wheeler's Seed Book, or as it is now known, the DISCO SEED BOOK, has been a family reference work in the farm homes of the Northwest. It has contained information of value on all farm and garden crops. Particular attention, however, has been given to alfalfa and corn. There has been so much demand for information on these two crops that we have adopted the plan of giving up one whole section of sixteen pages of the DISCO SEED BOOK to each of these two important crops. These two sections of the DISCO SEED BOOK are also being published under separate covers as the DISCO ALFALFA BOOK and the DISCO CORN BOOK. The catalog and price list of farm seeds, including descriptions and prices of all garden seeds and miscellaneous articles, is published as the DISCO ANNOUNCEMENT.

The problem of any organization is to render the greatest possible service to its patrons. It is the aim of this institution to make the DISCO SERVICE more efficient and of more value to its patrons each year. In the publication of these books and in giving special attention to hardy alfalfas and early varieties of corn for the North, we believe we are in line with progress in this direction.

The DISCO ORGANIZATION is at your service and we hope that every farmer and gardener in the Northwest will be benefited through its efforts.

Any of the four DISCO PUBLICATIONS is yours for the asking. The DISCO SEED BOOK, however, includes the other three, and if you are interested in farm and garden crops you should have this book on your book shelf at all times for reference.

Disco

Service

Disco Organization
Disco Information Bureau
Disco Alfalfa Nursery
Disco Registration System

DiscoPublications

Disco Seed Book
Disco Announcement
Disco Corn Book
Disco Alfalfa Book

DAKOTA
IMPROVED
SEED
CO.
MITCHELL
SO. DAK.



Our Method of Handling Seed Corn How and Where Our Seed Corn is Grown

Our corn is all grown under conditions that are right to produce that particular kind of corn. In order to produce the highest quality of seed that will give the greatest returns possible of the best corn, we study each variety carefully and handle it in such manner as to produce the results desired. For example, corn for North Dakota is secured from the best breeders and growers in the region for which we are growing the corn and is grown for us one hundred miles or more south of the locality where the corn is bred, so that it will fully mature before any possibility of freezing. We have fully demonstrated that corn so matured has a much higher vitality than corn which takes the whole season up to the last day of grace in order to ripen. Every year we go back to the same breeders and secure carefully bred stock from which to grow the corn that we ship out.

To be sure, this is growing corn south of where we expect to sell it. It must be held in mind, though, that this corn is being bred under the northern conditions, and that the growing of the stock south for one year will make no apparent difference in the season when the corn is taken back to its home locality. The extra vitality secured in having the corn fully ripen at the season of the year when it should ripen more than offsets any possible objection to having the stock grown south for one year.

We follow this practice particularly with corn for the extreme north, for it is impossible to secure varieties that will ripen there so as to produce satisfactory seed corn every year. In fact, North Dakota produces but a small portion of the seed corn that is used. If it could be depended upon to do this satisfactorily every year we would say that the seed corn grown there, properly matured and carefully handled by the best methods, would be our first choice.

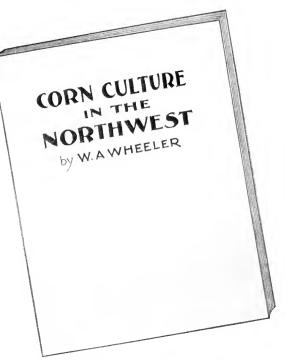
Our Method Assures Best Results

Under the existing conditions, our method comes the nearest to the ideal for northern seed corn. We have consulted the agronomists of the experiment stations of Minnesota, North and South Dakota on this proposition and have their approval of the method.

On stocks of corn for southern South Dakota, southern Minnesota, northern Iowa and northern Nebraska we do not find it so necessary to grow the corn south of its home locality, for we recommend the earlier varieties that mature by the 10th to the 15th of September. Even here, however, we try to maintain the earliness of all our stocks by having them bred in the northern part of the region to which they are adapted, and grow our stocks of seed a little south of this locality.

Careful Selection of Seed Corn

Most of our corn is selected first at the time of husking. This



CORN CULTURE IN THE NORTHWEST A Valuable Book for Every Corn Grower By W. A. WHEELER

We have published this book, believing that corn growers would be interested in learning more about our several years of experimenting and careful selection of varieties of corn that are best adapted to the varying conditions that exist in different localities.

What we have to say in this book is right to the point and does not contain a lot of generalities that must be waded through in order to get to the real meat of the subject. On the other hand, a careful study of the contents of this book will save farmers a lot of unnecessary, expensive experimenting, worry and poor crops.

And poor crops.

A copy of this book will be sent free of charge with every order of seed corn placed with us this season, but we want every buyer of seed corn to have a copy of this book and have arranged to send copies to any one sending us the names and addresses of five other farmers interested in seed corn. Just send us your name and address, plainly written, together with five others, and we will see that a copy is sent to you immediately, postage prepaid.



first selection usually includes from one-fifth to one-third of the output, depending upon the variety and the conditions of growing. If the variety contains more moisture than would be contained in good, air-dry corn it is handled in the best manner possible to remove the surplus moisture and put it in good seed condition. When it is prepared for shipment or for the sheller, it is all gone over again and all ears which appear to be shrunken or in any other ways show signs of poor quality or vitality are culled out. Corn that is bred in the North and grown south is usually so dry at the time of husking that it shells quite a percentage from the ear in handling. Such corn is not racked, but is carefully stored in ventilated bins in a dryhouse built specially for the storing and curing of seed corn. This is given a second selection at the time it is prepared for shipment. Most of our corn is, therefore, selected on the ear at least twice, and much of it three times, before it is shelled or shipped.

Testing

All lots of corn that come into our warehouse are tested for germination when they come in. We also make tests on all lots during the time the corn is in store so that we know at any time just what the vitality of each stock is. In ordinary seasons seed corn is not considered as satisfactory to be shipped unless it shows a strong germination of over 90 per cent. Most of our stocks show tests of from 95 per cent to 100 per cent. Every season we discard stocks of corn which show a germination below our standard.

This corn may have been carefully selected and placed on racks in our warehouses, but still show a very low germination. In such cases we simply discard the stock and sell it for feeding purposes.

Shipping Ear Corn

Various methods have been devised for the shipping of seed corn on the ear, and nearly all of them have serious objections. Sacks, crates and barrels have been used, but are all open to criticism. We are using the tight, wire-bound box for the shipment of most of our ear corn and we think we have something better than anything that has been used heretofore. A tight box prevents to a large extent the shelling of the corn in shipment, and what does shell is held in the box. Neither can corn in a box of this kind be meddled with. Altogether, we are very well pleased with this method of shipping ear corn. At times, on special stocks of corn, we find it necessary to ship ear corn in crates or bags, but we plan to ship in wire-bound boxes whenever it is possible to do so.



Box of Ear Corn Packed for Shipment

Shelling and Grading

All corn that is put out as shelled corn by us is carefully graded by the best grading machinery, thus removing practically all of the kernels that are off in size or shape. Grading removes from 20 per cent to 40 per cent of the shelled corn, depending upon the variety and condition of the stock. This process prepares the corn for the planter box. When graded corn is purchased there is not the shrinkage and waste that are obtained with corn purchased on the ear. We recognize the fact that it is recommended by many experiment stations and agricultural papers that all corn should be purchased on the ear. Where seed is to be used for breeding plots or where the buyer questions the selection of the corn which is made, this is the best manner to procure it. For general planting we recommend shelled and graded seed in preference to seed on the ear, because it has many advantages over corn on the ear.

Right here let us say that the grading of early varieties of corn is often a difficult proposition. The kernel found in early varieties is usually rather short and somewhat rounded, instead of long, wedge-shaped and flat, as found in the later southern types. For this reason it is practically impossible to do more than grade for size by removing the smaller tip kernels and the larger butt kernels.

In planting seed corn of the earlier varieties the round hole plate planters are usually more successful than the edge drop planters.

Have you read about Disco Registered Alfalfas? They are the best kind of crop insurance you can have.

Corn for the North

Improved Varieties Mean Greater Production

We have heard people say that North Dakota would some day produce more corn per acre, and better corn, than Iowa or Illinois. We hardly believe so strong a statement as this, but we do know that North Dakota and other northern regions are increasing their corn acreage and yield every year and that some of the more southern localities will have to look to their laurels in corn production. The one thing that is bringing about this greater production of corn in the north is the introduction of earlier and hardier varieties of high yield and good quality. We are laboring tooth and nail to secure the right corn for the north and know that our efforts are being rewarded. In our Brown County Yellow Dent we know that we have something that will produce a crop of corn under conditions where other varieties fail. We are not bragging on its purity of type and not putting it up against Reid's Yellow Dent for blue ribbons, but we are putting our highest recomnendation back of it for the Northwestern states where "corn raising" is always followed with a question mark.

Performance Record the Basis of Selection

All the corn we offer deserves the name of corn. We are not taking those varieties which are not productive and which are merely grown under the name of corn, but are working for those varieties that will produce good corn and enough of it to pay the farmer for growing it. We have not, however, worked for the large eared varieties, for we have found by good, hard experience in the north that the smaller eared varieties are far safer and much more productive than those with larger ears.

Best Results from Northern Bred Seed

Just a word as to our method of handling the northern seed corn proposition. Our early corn is practically all grown in the vicinity of Mitchell, but is all grown from seed that is bred and selected under the northern conditions for which we are growing our corn. We know that seed corn bred and developed in the extreme north, but grown for one year south of this latitude to produce a high quality and high germination, is better for northern planting than seed corn grown in the extreme north and only partly matured. The extra vitality and growth secured by our method more than offsets any possible lengthening of season that might be obtained in the one year this corn is grown away from home. We secure the seed from which we grow our stock from the north every year and do not continue to select it at our latitude. Results that are being obtained with this kind of corn serve to show that our position in this matter is right. It has the approval of all the agronomists of the northern states with whom we have consulted regarding it.

Corn Crop Better than Summer Fallow

Corn is grown in the north for other reasons than the mere production of a crop of corn. A corn crop takes the place of a summer fallow, and is a far better business proposition. If the crop of corn alone is a financial success it is clear gain, because the benefits derived from the cultivated corn crop preceding a small grain crop will pay for the growing of the corn. Many are still making the mistake of trying to grow the large cared, beautiful varieties that come from the south. They would far better grow one or more of our very early sorts that have been tried out and which we know will produce corn and good corn, if anything will.

Can You Afford Poor Seed Corn?

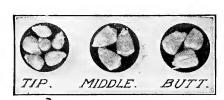
Seed corn at \$1 per bushel costs from 12 to 17 cents per acre.

Seed corn at \$3 per bushel costs from 35 to 50 cents per acre.

A bushel of seed which increases the yield five bushels per acre at 30 cents per bushel is worth \$9.

Seed corn which costs \$3 per bushel must produce, in order to pay for itself, one bushel more of corn per acre than seed corn that costs \$1 per bushel.

The loss on a bushel of seed corn which gives a 50 per cent stand is from \$10 to \$15 spent as rent of land not producing anything, and time spent in plowing and cultivating land without a prop.



This cut shows kernels of corn in the plates of a corn planter. This shows very plainly that one cannot secure an even stand of corn by planting a mixture of tip, middle and butt kernels. The only way to avoid this is to plant graded seed corn. The extra yield secured will pay 500 per cent on the extra cost of well graded seed.

"There is more money in alfalfa and corn for live stock than in any other single crop or combination of crops in the world."—W. A. Wheeler.

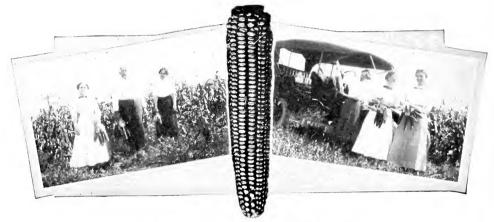
Northwestern Dent Corn

In North Dakota this corn is grown perhaps more largely than any other one variety. It is extremely early and hardy in North Dakota and northern South Dakota. No other variety seems to have given the uniformly satisfactory returns in North Dakota that are given by the Northwestern Dent.

The ears are of fair size, rather long and slender. The type of ear is intermediate between a flint and a dent corn. They are usually from seven to nine inches long and have from ten to fourteen rows of kernels.

The kernel is red with a yellowish cap, but there is a great variation in the colors of the kernels as well as in the type. The true type should have a slight dent, but the ears show a great variation in this respect.

This corn is too popular throughout the Northwest to need any further recommendation from us. It is the standard early corn in North Dakota and will probably retain its popularity for years to come.



Vice-president Morrow Inspecting Fields of Northwestern Dent Corn

Minnesota No. 23

An early strain of the standard White-Capped Yellow Dent. Originated on a farm in northwestern Minnesota and introduced by the Minnesota Experiment Station after several years' trial. Recommended by that station as probably the best extremely early variety for northern Minnesota. Records of over seventy-five bushels per acre have been secured in Minnesota, northwest of the Twin Cities, but from forty to fifty bushels of dry cured corn would be considered a good average yield.

Minnesota No. 23 is being grown quite extensively in North Dakota, and is "making good." We can also recommend it for northern South Dakota, Montana or any locality that requires the very earliest corn that can be grown.

MINNESOTA KING—A variety of early corn that is popular in some districts, but is not largely grown. In type this resembles both the dent and the flint varieties. The ears have eight rows of very broad, flat kernels, often much broader than long. The dent is shallow; color is light yellow. Season usually about the same as Minnesota No. 13, or possibly earlier.

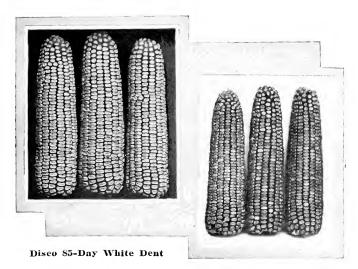
RUSTLER WHITE DENT—A standard variety of corn in the northern states. Very well liked by some growers. Ears of fair size, kernels rather shallow, season from 90 to 95 days. Very productive. We do not plan to keep this on hand at all times, for our Disco 85 and 90 Day White more than take its place for the region to which this is adapted.

Disco - Pride Corn

An Improved Strain of Brown County Yellow Dent

In 1906 we first ran across a variety of corn in Brown County which had made a good record for yield and earliness. It has been grown there and has matured satisfactorily every year for the past eighteen or twenty years. It has been tested at the Highmore Experiment Station, where it yielded between forty-five and fifty bushels per acre. In 1907, at the same experiment station, this corn outyielded all other varieties and showed a drouth resistance second to none. In fact, there was no corn at the Highmore station in 1907 that was nearly equal to this in resisting dry weather. In type it resembles the Pride of the North and North Dakota Golden Dent.

The original stock of Brown County Yellow Dent as we secured it in 1906 had not been selected for uniformity of type or color. The improved strain which we offer as Disco Pride shows a great improvement over the original. It retains the extreme earliness of the original strain, but has a better type of ear. There is still some variation in color and shape of kernel, but this does not injure it in any way when it comes to producing



Disco Pride Corn

a good yield of corn under adverse circumstances. We believe that the Disco Pride corn planted in the northern part of South Dakota, North Dakota or Montana is as safe a proposition as anything in the way of corn that can be secured. Corn-growing in Montana is just in its infancy. We have been furnishing this variety of corn to our Montana customers for several years and have the most favorable reports from it. In fact, we are now having much of our stock-seed of Disco Pride grown there and can furnish our Montana customers with seed of this variety grown from Montana bred and grown stock-seed. The name "Disco Pride" implies the probable origin of this corn as an acclimatized strain of Pride of the North. The Early Pride which has been offered by the Dakota Improved Seed Company for several years is a few days later than Disco Pride.

They Like Our Disco-Pride or Improved Brown County Yellow Dent

Brown County Yellow Dent corn is a good corn for this part of South Dakota. I like your manner of doing business and believe you are on the right track for success.

J. A. HALK, New Underwood, S. D.

Your seeds have always been the best I could get anywhere and the seed corn has been fine. Your Brown County Yellow Dent is, I think, the best corn I have tried for the Black Hills country.

E. D. SMITH, Piedmont, S. D.

Source of Seed Corn

In many of the extreme northern localities that are entering upon corn production. the problem of seed corn is always a serious one. Corn can be profitably grown in these localities, but it is often very difficult to secure seed corn that is well matured and has a sufficiently high vitality to produce a good yield the following season. The experiment stations and others interested in the extension of better corn growing in the northwest have been giving considerable attention to this problem. It appears that there will probably not be more than one year out of three or four in which the extreme north will produce anywhere near a sufficient amount of suitable seed corn for its own use, With this condition confronting us it is probable that the problem of producing in large quantities seed corn for the north at reasonable prices will be solved by the breeding of special types for northern conditions and taking such seed far enough south each year so as to be sure to secure the best maturity and vitality of seed and take this north the following year for general crop purposes. It is true that the growing of corn south of its normal locality has a slight influence each year on the type and season of the corn but this is not sufficient in any one season to be appreciable. If the seed is taken from the north each year and the seed grown south only one year before taking it back to its home locality, the advantages gained from full maturity and higher germination, which are usually found in such corn, more than offset any disadvantage from the corn having been grown in another locality for one season.

There is such a large proportion of years in which the corn in the north does not reach ideal seed condition and yet produce a good yield of good market corn that the proposition of producing and securing southern grown but northern bred seed is one that has been given the attention of northern corn growers for several years. It is the problem that some of the best seedsmen of the northwest have been working on. It is not the proposition altogether as to where the seed corn is grown, but where was the seed bred from which the seed corn was grown? This is the vital point to consider. Seed for northern conditions should not be continually grown in the south year after year from the same original stock. This would ultimately produce a later type of corn not adapted to northern conditions, but the production of seed corn south from northern bred seed is probably the very best method of solving this problem and is the one practiced by the Dakota Improved Seed Company of Mitchell, S. D.

Testing Corn for Germination

In order to be sure of the germination of seed corn it is well to make several tests at several times and possibly under varying conditions. If the seed corn has been carefully selected and carefully stored a preliminary test may be made by taking one kernel out of each of 100 ears or more to determine the general run of the stock. If the test runs very high and strong the necessity for ear-testing is not so great, but it will always prove profitable to ear-test corn when it is possible to do so.

If the seed corn has not been specially stored and one has to depend on corn that has been stored in a crib, it is well to make a preliminary ear-test with a view to determine whether it would be possible to select strong seed corn from the lot in question.

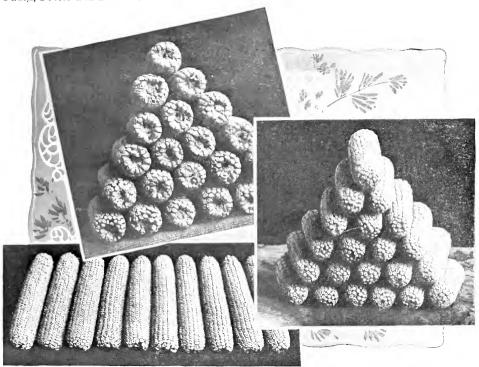
I am referring here to practical conditions, not necessarily to the ideal. For example, in the spring of 1912 the supply of good seed corn in the country was very low and it was necessary to use a large number of stocks of corn showing a germination from 75 to 85 per cent, because very few farmers had good seed corn and it was necessary to use the very best obtainable. If, at that time, every corn grower had insisted upon ideal conditions of seed corn, he would have had to lessen his corn acreage or go without planting altogether. Instead of that farmers of the Northwest did the very best they could and produced the largest crop of corn on record in spite of poor seed in the spring of the year. South Dakota's corn production of 1912 was over 76,000,000 bushels and never before had the state reached much over the 55,000,000 mark.

As to the details of testing, will say that there are numerous commercial testers on the market as well as home-made testers which will be found described in experiment station bulletins. These should be consulted freely and the best means at hand used for testing corn. Nearly every state experiment station has published some little pamphlet or bulletin giving full instructions, and these can be secured by writing for them.

Disco - White Dent Corn

Many of the corn growers of the Northwest are partial to a white corn. Some think that white corn is hardier and a better yielder than yellow. Others think it feeds better. Whatever truth or fiction there may be about the matter, it is certainly a fact that a good deal of white dent corn is raised and that there are strains or varieties that are "making good" over the whole Northwest. We have given the matter considerable thought and list here three varieties of different seasons. We wish especially to call attention to the Disco 85-day and the Disco 90-day varieties.

DISCO 85-DAY WHITE DENT—An improved strain of Payne's White Dent which has proved to be one of the very best varieties for the Northwest. Adapted to northern half of South Dakota, Southern North Dakota, Central Minnesota and other similar locations. A heavy yielder and a good variety in every way. Our stock seed is usually grown in Faulk. Potter and Brown Counties in South Dakota.



Disco 90-Day White Dent

DISCO 90-DAY WHITE DENT—From observations we have made the past two seasons, we feel perfectly safe in recommending this as a general crop for the latitude of central South Dakota and southern Minnesota.

We haven't handled a variety of corn that we have been more enthusiastic over than the Disco 90-day White Dent. It is more than meeting our expectations. Besides being early, the ears are good size and kernel is deep and well shaped. The photographs of this corn on this page show what the corn is. Notice the shape of the ear, the well filled butts and tips, the good type of kernel. In fact, it is hard to pass an unfavorable criticism on this variety.

Besides taking first premium at the South Dakota corn show for several years and sweepstakes in the central district in 1913, and first at the South Dakota state fair in 1912, this corn has won honors in other places and never has had to take a back seat in any place under fair competition.

DISCO 100-DAY WHITE DENT—An acclimatized strain of the Silver King. It is probably true that both the 85-day and the 90-day strains trace back to this well-known variety, as they have some of the ear-marks. but they are now very much earlier. In the Disco 100-day White we wish to preserve much the same season and type of the original Silver King or the Wisconsin No. 7. Recommended for southern South Dakota, northern Iowa and extreme southern Minnesota.



Hogging-Down Corn

In Bulletin No. 143, published by the Iowa Agricultural College in September, 1913, Prof. John M. Eyvard gives some very valuable experimental results in hogging-down We quote here brief extracts from this bulletin.

Advantages Offset Disadvantages of Hogging-Down

"Obviously there are some disadvantages to "hogging-down" corn, such as wet weather, sometimes packed and hardened fields, difficulty of fencing, loss of stover, and weather, sometimes packed and hardened fields, difficulty of fencing, loss of stover, and so on, but the practice nevertheless is quite widely followed all over the state in spite of the drawbacks; the significant distinctive advantages in labor saved, rapid, economical gains, fertility increase and others, greatly overshadow the disadvantages. One enthusiastic Iowan who successfully practices the method puts it in this wise: "There is no way of feeding hogs that has not its advantages and disadvantages.' . . 'Everyone must solve for himself which predominate.' Another from Pottawattamie county says: The advantages are so great in our section that with due regard to the small disadvantages many are planning to do more of it.'

"One man from Marion county may be quoted thus: "The man who gathers corn that intends to feed to fattening hogs any time in the fall is like the fellow who insists on

he intends to feed to fattening hogs any time in the fall is like the fellow who insists on he intends to feed to fattening hogs any time in the fall is like the fellow who insists on, plowing with the old wooden moldboard plow, doing hard work without any compensation.' A Hardin county hogman writes: 'I was the first one around here to "hog-down" corn, and they laughed at me, but those that laughed are now the most enthusiastic, saying it is the only way.' This unique expression, 'My neighbors all like to work too well to "hog-down corn," comes from Eastern Iowa. 'I have been "hogging-down" corn for ten years and if I should farm for fifty years more would keep right on doing the same thing,' says a man who has studied the problem for ten years and follows it when conditions are viring.

conditions are right.

"The practical experiments conducted by the animal husbandry section of the Iowa Station demonstrate quite clearly that hogs can gather their own corn to advantage by making efficient use of the grain eaten as they carry on their labor-saving and fattening making efficient use of the grain eaten as they carry on their labor-saving and fattening campaign. The results show, also, however, that in the cornfield, as in the dry lot or on pasture, the same general principles of nutrition govern the hogs' appetite, digestion, assimilation, growth and fattening. In hogging-down it is necessary to figure where the protein is coming from to grow the young hogs. True enough, cornfield weeds such as purslane, lamb's quarter, pig weed, morning glories and others may furnish considerable of the muscle and bone forming materials, yet the commonly used 100 to 150 pound shote is still in need of more building and growing material than is found in corn alone, and if the field is clean, free from weeds, and pasture is not available, some means should be provided whereby the animal is given more muscle and bone building materials than the corn crop can possibly furnish."

Some of the Advantages of Hogging-Down Corn

Labor is saved. Four handlings of the corn crop are omitted.

Storage charges are saved upon the portion of the corn hogged, inasmuch as crib is not needed. space

3. Returns are equally as good in pork produced where the hogs gather their feed themselves as when it is hand fed.

4. The hogs develop good constitutions with considerable strength and are in excellent condition for quick fattening feed after coming out of the field.

5. No manure is lost, practically speaking, as in dry lot feeding; of course this does

not apply to pasture.
6. The manure is evenly and uniformly distributed over the field in such a manner

as to do the most good without the intervention of human labor.
7. The crop is harvested without waste, the hogs if rightly managed picking up practically every stray kernel of corn.

The weeds may be cleaned up to some extent.

- Hogs may follow up cattle and otherwise save waste. Facilitates and encourages the gathering of seed corn early from the standing 10. corn in field.
- Poor stands of corn may be taken advantage of in that rape may be sown at the 11. last cultivation, thus enabling the land to produce a full crop that season; the hogs do the rest.

12. Brood sows which are to farrow spring litters may be advantageously run into the field after the fattening or other hogs are removed.

13. Fall plowing is sometimes possible if the hogs clean up the field early, thus

preventing rush of spring work.

14. Organic plant matter will be largely added to the land if supplementary crops, such as rape, rye, soy beans and peas or the like are sown in the cornfield.

Corn is harvested more quickly.

The Variety of Corn to Use

"The highest yielding corn which is adapted to the locality is the kind to use. One would do well to have a small field of an early variety of corn, possibly, on which to turn hogs the first thing in the fall, and thus lengthen the "hogging-down" season. "Sweet corn is a favorite with many because it furnishes pasture which is ready from August 1 on, depending upon variety, season and so on. Thin sows which have weaned their pigs and are ready to be fattened will do exceptionally well in a field of sweet corn, they eating the entire stalk and all at the beginning.

"Sweet corn has the advantage in being green and ready when the blue grass is hard and dry. Furthermore, at this time of year the supply of corn in the crib usually runs low, thus it is a friend in need.

"Rape and other crop supplements make better growth in the sweet corn than they do field corn ordinarily because of less shade and more optimum moisture conditions early

in field corn ordinarily because of less shade and more optimum moisture conditions early in the season."



Minnesota No. 13 Corn



Minnesota No. 13 Corn

This corn needs no recommendation from us. Any one who has been at all in touch with corn growing in Minnesota and the Dakotas knows about Minnesota No. 13 and its record. Introduced by the Minnesota Experiment Station in 1896, it has been distributed across the United States and into some portions of Canada. It is generally considered as the best early corn. We now have some varieties that are earlier, but it is difficult to find as early a corn as Minnesota No. 13 that is equal in quality and yield. It will go down into history as having done more to extend the corn belt in the northern states than any other one variety. The yield of Minnesota No. 13 in Minnesota and the Dakotas ranges from forty to ninety bushels per acre; fifty bushels per acre is an average yield. One field of this strain, at Mitchell, in 1908, produced good, ripe corn in eighty-seven days from the time it was planted. We recommend this strain for central South Dakota and south central Minnesota. We do not recommend it for southern South Dakota or northern Iowa, for there are varieties which will give better returns at this latitude.

In our strain of Minnesota No. 13 we endeavor to retain the earliness of the true variety by getting the seed for our own planting either directly from the Minnesota Experiment Station or from one of their accredited growers each year. We thus preserve the type of the experiment station strain as nearly as possible, which would not be the case if we continued to raise this variety in the vicinity of Mitchell or south of here from the same stock year after year.

Riverview Special Corn

The Riverview Special has been developed by W. S. Hill on his Riverview Ranch, five miles south of Alexandria, S. D. Riverview Ranch consists of 1,360 acres and is located along the Jim River, in the best corn growing section of the county. It is the home of the famous Riverview herd of Red Polled cattle, which has taken first place at the state fairs of Minnesota, South Dakota, Iowa and Nebraska for several years. Mr. Hill has grown hundreds of acres of Riverview Special corn every year for several years and has maintained a separate breeding plot from which to select his seed, special care being taken to improve it in both quality and yield. The Riverview Special is a strain of the corn known in Hanson County under the name of Shabino corn. Several strains of this corn have been developed in the hands of special breeders under the names of Dakota Gold, Fulton Yellow Dent, Hanson County Yellow Dent, Riverview Special and others. We have looked these over carefully and we think the Riverview Special which we are offering here comes nearer meeting our needs for this latitude than the others. This strain hasn't been selected for the largest type of corn. The ear, however, is of good size and the season of the corn is somewhat earlier than some of the other strains. None of the types has been selected so that they are very pure, but all are good yielders, have a good depth of kernel, shell a large percentage of corn to the ear, produce an ear on practically every stalk, and, summing it all up, they produce a good yield of fine quality corn.

"There is more money in alfalfa and corn for live stock than in any other single crop or combination of crops in the world."—W. A. Wheeler.





Prize Cup for Winner in State Corn Contest

Prize Cup for Winner in Each County Contest

Prize Cups for Boys

Offered by the Dakota Improved Seed Company, Mitchell, S. D.

We believe in encouraging the boys to greater agricultural efforts, and in order to

We believe in encouraging the boys to greater agricultural efforts, and in order to further the interest in corn growing contests conducted by the superintendents of county schools in South Dakota we offer a beautiful silver cup like the smaller one shown above to the boy in each county exhibiting the best ten ears of corn.

This silver trophy cup stands eleven inches high and is beautifully engraved in corn. The name of the winner each year will be engraved on the back of cup. The cup must be won three years by the same boy to become his permanent property.

The large cup shown above goes to the winner of the boys' contest at the state corn show. This cup stands twenty-two inches high and is beautifully embossed and engraved with the leaves and ears of corn.

The competition for this trophy is open to the boy in each county of South Dakota who wins in the county corn contest conducted by the county superintendent of schools. In counties where no school contest is being held any boy 16 years of age or under who has grown the corn for his exhibit and has complied with the rules of the South Dakota Corn and Grain Growers' Association may compete for the trophy. It must be won three years to become the permanent property of any one exhibitor.

The photograph above, on the left, is Ernest Sorenson of Elk Point, S. D., the first winner of the Boys' Champion Trophy.



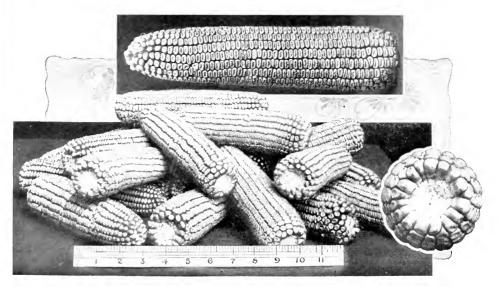
Offered by the Dakota Improved Seed Company for the highest scoring ten ears of corn exhibited at the South Dakota Corn and Grain Show, Mitchell, S. D.



Disco - Murdock Corn

Exceptionally Good 100-Day Variety for Northwest

In offering the Disco Murdock corn we have a variety that has for the past twenty or more years been developed for earliness and yield. We think it more nearly meets our ideas of the ideal corn for southern Minnesota and South Dakota and northern Iowa than any other variety we know of. It is true that the ears are not large, but they are well formed, shell off a large percentage of corn to the ear; the kernel is deep; the germ is large and the color is as near pure as any variety of yellow corn of equal earliness that we know of. In feeding value the Disco Murdock ranks second to none. It is almost



Disco-Murdock

impossible to find a starchy ear in the lot. Every one who sees a pile of this corn for the first time remarks: "What a beautiful corn!" and it certainly is true that the color of this corn is beautiful. It has the richest golden yellow of any corn that we handle. The cobs are nearly all true to type. One rarely finds a white or pink cob in the stock.

When we first offered this corn in 1908 we were not fully aware of the value of it for the Northwest. Since trying it out for several years and getting results from all those who have purchased seed of us, we find that we made no mistake in offering it, and are in a position now to put our unqualified recommendation back of it. We have shipped it into all parts of northern Iowa, southern Minnesota, southern South Dakota and northeastern Nebraska, and, so far as reports are received, it has made good everywhere that it has been sent.

From careful estimates of the cornfields of Davison County, our home county for the past three years, we think we are perfectly safe in saying that there are more acres of Disco Murdock corn grown here than there are of all other recognized named varieties put together. And this in spite of the fact that for several years we had to turn down hundreds of orders for Disco Murdock seed corn and supply other varieties or cancel the orders altogether.

We do not especially recommend the planting of this variety of corn much north of the latitude of Mitchell or the southern tier of counties in Minnesota. We have reports of very satisfactory yield and full maturity at quite a number of points north of this, but still we do not feel fully safe in recommending it very much north of this latitude.

WIMPLE'S YELLOW DENT—(110 days.) A variety that is grown considerably in some localities of southeastern South Dakota. It is rather late for the latitude of Mitchell, but matures here in favorable seasons. The ears are of good size and very rough. The kernels are deep, have a decidedly pinched dent and are usually somewhat starchy. The variety has won premiums at a number of corn shows and is popular with some who like a very rough corn. Wimple's Yellow Dent is not always carried in stock by the Dakota Improved Seed Co. Refer to price list.

Corn for Forage or Ensilage Corn

Fodder corn is a very valuable crop on the farm, but in the Northwest in particular it occupies a place that cannot be filled well by any other crop. It not only produces a large amount of forage to the acre, but supplies a cultivated crop that can be used in systems of crop rotation in place of the summer fallow. We all know that the summer fallow is not an economic proposition on the farm and that it is far better to grow a good cultivated crop and keep it well cultivated. In the selection of corn for fodder purposes we do not recommend planting the very large, late varieties in the north, because they do not come near enough to maturity to produce the largest amount of feeding value. They are mostly wood fiber and water. We recommend the early varieties that come nearly or quite to maturity for this purpose. It is not so necessary that the crop fully mature as it is with corn grown for other purposes, but the nearer it comes to maturity, the greater the food value and the more valuable it is to the stock feeding on it.

The following is quoted from Bulletin No. 65 from the Central Experiment Farm, Ottawa, Canada. The reasons given here are equally applicable to the entire Northwest.

Reasons for Growing Forage Corn

The reasons for growing or making an attempt to grow this forage crop wherever live stock are kept in any numbers are numerous and cogent. A few of them follow:

- 1. As a plant capable of yielding a large amount of valuable forage under a great variety of soil and climatic conditions, corn is without an equal.
- 2. When properly preserved, whether as ensilage or dried, it can be used as material to render other less palatable roughage more acceptable to farm animals.
- 3. It is the best plant or crop for ensiloing that can be grown to advantage in Canada. It is practically a perfect crop for this purpose, hence it helps to solve the great problem of how to furnish an abundant and cheap supply of succulent food for winter or summer feeding of dairy or beef cattle.
- 4. When properly grown and well preserved as ensilage, it is the equal of or superior to roots in feeding value and palatability. It can, however, generally speaking, be more cheaply grown and more easily preserved than roots.
- 5. The labor of growing an acre of corn is of a character much more agreeable to perform and much less arduous than that of growing an acre of roots of any description.
- 6. Corn being a cultivated or hoed crop serves well to clean the land, that is, free it from weeds, so fitting it for grain growing, and putting it into shape to seed down to grass or hay.
- 7. Corn is a gross feeder and may be depended upon to make good use of a never so abundant supply of plant food. It is, for this reason, particularly well adapted to occupy that place in the rotation where humifying vegetable matter and a fairly liberal supply of barnyard manure unite to supply large quantities of plant food suitable for root, leaf and stem growth rather than for seed production.
- 8. The growing of corn on a fair proportion of the arable land on the farm will permit of keeping more cattle and so increase the revenue as well as augment the manure supply so essential to the maintenance of soil fertility.
- 9. Corn when preserved as ensilage, can be stored much more cheaply in much less space than any other roughage. In addition, stored in this way, it will keep indefinitely and is always ready to feed.
- 10. In thirty years' experience in farming in the Ottawa valley, the writer has seen all kinds of grain crops utter failures, he has seen hay so light as to not pay for the making, and roots and potatoes practically nil, but in all that time he has never seen a failure in the corn crop. There has always been a fairly profitable return from the fields in corn.

The varieties of corn offered by the Dakota Improved Seed Co. for fodder corn are grouped under the following names:

NORTHERN FODDER CORN—Suitable for growing in the extreme north. We use the earliest varieties we carry for this purpose.

MEDIUM FODDER CORN—Includes varieties like the Disco Murdock, Silver King and others of this season.

EARLY SWEET FODDER-Very fine for early feed. Sow broadcast or in drills.

EVERGREEN SWEET FODDER—Tall growing sweet corn, producing a large weight of foliage and stalks per acre.

Second Grade Seed Corn

In handling and cleaning our varieties of seed corn it often happens that some portions of our choice lots have to be kept out because of some accidental mixture of other varieties. This sometimes amounts to 5 per cent of the lot, but oftener it is only a trace. Because of this mixture we cannot offer these lots as first grade seed corn. They represent the same field stocks as first grade corn, and for many purposes are equally good.

We do not like to go on record anywhere as recommending anyone to use second grade seed of any kind, but we can candidly say that in many cases for all practical field purposes some of our second grade seed corn will give returns equal to the first grade. The same can usually be said for Emerald brand alfalfa.

Whenever we have these in stock we will offer them at prices much lower than first grade corn. When ordering give first and second choice of variety, for our supply of any one variety will be limited.

A "Boost" for Brown County Yellow Dent

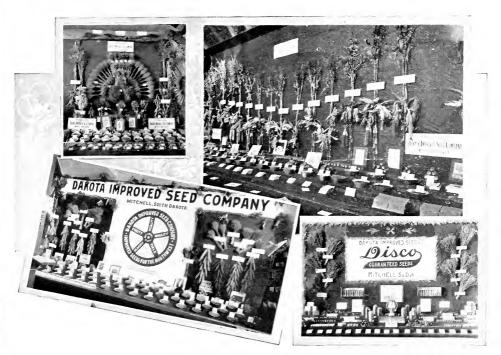
Permit me to speak a word of praise for your Brown County Yellow Dent corn. The half bushel of seed which I got from you last spring did not reach me until after all my other corn was planted. I planted this on a separate plot and gave it the same treatment as my other corn. We had no rain from July 4 until August 13—at the latter date the Brown County Dent corn was well eared, with an occasional ear getting ripe, while the rest of my corn was standing still waiting for rain. Had it not rained on August 13 the Brown County Dent would have made good corn, as it was practically made at that time, while the other corn would have been a failure. My main crop the following year will be Brown County Dent, for, although it is a small corn, it is more drouth resistant than any other corn in South Dakota. I would recommend its use everywhere west of the ninety-ninth meridian.

Yours respectfully,

H. H. STONER.

Superintendent of South Dakota Farmers' Institutes.

Highmore, S. D., January 16, 1909.

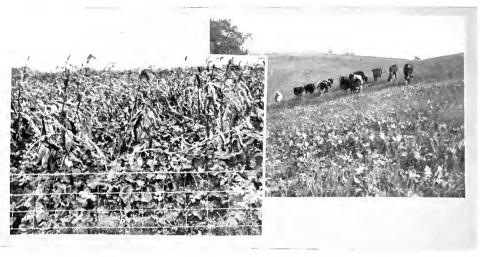


Several Exhibits of Disco Seeds.

Dwarf Essex Rape

Rape can be put to quite a number of uses. It may be sown alone as a spring crop to provide early pasture. It may be sown with spring grain to provide fall pasture after the grain is cut. In this latter case it is better sown after the grain is up and the ground dragged immediately after sowing to cover the seed. As it is a common practice to drag or weed our grain crops after they are up, the sowing of rape at this time can be easily done. Rape may also be sown just before the last cultivation of corn to provide fall feed and increase the yield of feed per acre of ground, or rape may be sown with fall rye to provide fall pasture.

The uses of rape are hardly limited to those mentioned above, as it may be sown at almost any time of the year and will provide quickly a large amount of forage. The farmers of the Northwest have not yet come to realize the possibilities of rape. There



Rape Sown in Corn at Last Cultivation

Rape Sown with Small Grain for Fall Pasture

are thousands of acres of land sown to small grains that could be made to yield an abundant fall pasture by the sowing of two pounds of rape seed to every acre of ground. The cost of the seed is so little and so small an amount is required that there is really no expense connected with it compared to the value of feed that is secured. The amount of seed that is sown per acre varies from two to six pounds, depending upon the way it is handled. When sown alone, from five to six pounds are recommended. When sown with small grain, two to three pounds.

Sorghum

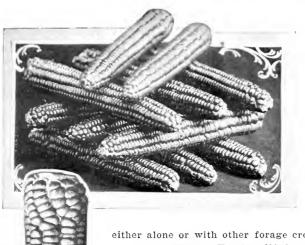
In many localities sorghum is taking the place of corn as a fodder crop. The reason for this is that it will stand more dry weather than corn. It also produces more weight of palatable fodder per acre. Where sorghum is grown to cut for hay it should be sowed broadcast at the rate of about thirty to forty pounds per acre. If it is to be cut with a corn binder it should be sowed in drills three feet apart at the rate of six or eight pounds per acre. We consider the latter method the better.

AMBER CANE—This is the common type of Amber Cane grown throughout the northern states for fodder purposes. It produces an abundant crop of fodder of very fine quality. It can also be used for syrup, and at several points in our northern states it is grown for this purpose.

S. D. No. 341 AMBER CANE—This is an extremely early strain of Amber Cane which has been grown at the Highmore and Belle Fourche Experiment Stations for several years.

KAFFIR CORN—This is one of the non-saccharine sorghums and is used as a fodder plant all through the great plains region. It makes a very strong growth and produces an abundant supply of excellent fodder, either green or dry. It is relished by all kinds of stock. Sow at the rate of fifteen to fifty pounds per acre in drills or broadcast.

Disco Flint Corn



There is always a large demand for flint corn in all the Northern states and Canada. The various types of flint corn vary somewhat in earliness and yield, but all of them seem to possess the ability to mature a good crop of corn under adverse conditions. the Northwest flint corn is largely used as a crop for "new breaking." It is also much used for late planting, where early crops fail to grow or for any reason the crop cannot be planted until late in the season. In this latitude it can usually be depended upon to produce good corn if planted as late as the 4th of July. Flint corn is a very good type of corn to plant where the crop is to be fed in the field. It may be planted

either alone or with other forage crops for this purpose.

DISCO AMBER FLINT. (90 days)—A variety that has been bred to overcome the undesirable traits of some of the other varieties of flint corn. It is a good yielder, producing from thirty-five to forty-five bushels per acre under ordinary conditions. It has a fair sized ear and carries it well up on the stalk, while most other flint sorts produce the ear on the extreme lower part of the stalk, thus making it a back-breaking job to husk the corn. The stalks are good height. leafy, and ordinarily produce two good ears to each stalk.

In breeding for the above desirable qualities, earliness has not been lost sight of. In fact, this variety is even earlier than most other flint varieties and about the same season as the very early strains of Minnesota No. 13.

The typical color of this variety is amber, but some of the ears are almost red at the tip, like the old Smut Nose Flint, so well known in the North.

DISCO 80-DAY WHITE FLINT-Ranks with Gehu as being one of the earliest varieties of flint corn. Very dwarf and suitable for early hog feed or for late planting to "hog-off" in the fall.

DISCO-MERCER FLINT (80 or 85 days)—Considered one of the best varieties of corn for planting in the northern half of North Dakota. One of the earliest varieties and a good yielder. The ear is of fair size and has eight rows of clear yellow kernels.

GEHU FLINT (80 days)-One of the earliest varieties of flint corn. Ears small, short, yellow in color. Recommended for the extreme north, where other kinds will not mature.

DISCO-SQUAW CORN (85 days)—A very early "Native" variety, having kernels all colors of the rainbow. A very beautiful corn and one that is very popular for late planting.

WHITE SQUAW CORN-Varies in type from a true white flint to a strain called White Flour Corn. The kernels of the latter are starchy and not hard like the true flint corn. Season from 85 to 95 days.

LONGFELLOW FLINT (90 to 95 days)-An eight-rowed yellow flint variety, well known almost everywhere in the North. A good yielder and very popular.

TRIUMPH FLINT (95 days)—A twelve-rowed standard yellow variety. One of the best yielders and very popular.

SANFORD FLINT (100 days) - An 8-rowed white flint corn, popular in the Eastern states. Hardly early enough for the extreme Northwest.

There are several varieties of flint corn described above that are not usually grown or carried in stock by the Dakota Improved Seed Co. Please refer to page of prices on seed corn for information covering stocks offered.

Disco

Amber Flint Corn.



Head of Black Voronezh and Field

Showing Rows of Kursk Millet Grown for

Selection at the Government Experi-

ment Station, Newell, S. D.



ery year since it was introduced in 1898 from Kursk, Russia. It has given excellent results during the whole time, and in dry years the weight and quality of the hay have been far ahead of the common German or Hungarian millet. In favorable seasons the difference has not been so marked, but is always in favor of the Kursk, Our stock is grown from selections that were made at Brookings by Mr. Wheeler in 1904.

In dry sections we do not think the German millet can compare with

the Kursk. In a moist soil and under favorable conditions, however, the German gives excellent returns. We refer to the finer quality of German millet, and not to the coarse stock that comes from the extreme south. The coarse southern seed produces a great bulk of hay, but of rather poor quality. Our stock of Kursk millet has been in demand by seedsmen all over the Northwest.

DISCO-KURSK No. 1—A pedigreed strain of Kursk Millet that has been selected for several generations by Mr. A. C. Dillman at the Government Experiment Station, Newell, S. D. This selection has shown a marked superiority over other selections in drouth resistance and we recommend it particularly for localities with a limited amount of rainfall.

SIBERIAN MILLET—This is the same type of millet as the Kursk. In fact, the Kursk millet is a special importation of this millet from Russia. Our Dakota Selected Kursk is a pedigreed Kursk stock. What has been said of the adaptability of Kursk millet to the Northwest applies to a large extent to the regular Siberian millet.

GERMAN MILLET—This millet occasionally makes a taller, ranker growth and produces a greater weight of hay per acre than the Kursk, under favorable conditions. Our stock is clean and of excellent quality, and unless otherwise specified, is Dakota grown.

JAPANESE MILLET—This millet produces an abundance of hay, but it is coarse and of rather poor quality.

BLACK VORONEZH MILLET—This is a variety of broomcorn millet imported by the United States Department of Agriculture in 1898. So far as our records show, where it has been distributed throughout South Dakota, it has given remarkable yields of seed. This millet is not used for hay, but is grown only as a seed crop and is used to feed chickens and hogs. We do not recommend it for very moist localities, for it succeeds much better under drier conditions.

EARLY FORTUNE—This is one of the broomcorn type of millets similar to the Black Voronezh, except in color of seed, which is red instead of black. This is grown more generally in North and South Dakota than the Black Voronezh.

Disco Seed Corn

For full description of the varieties of seed corn and other crops listed on this page we refer you to pages 1 to 16 of the Disco Corn Book or pages 33 to 48 of the Disco Seed Book.

Prices given here are those in force January 1, 1914, and we have anticipated as far as possible the prevailing prices for the season, but are obliged to hold these subject to change at any time without notice. Bags included at these prices.

change at any time without notice. Bags mended at these pri	and the without notice. Bags included at these prices.								
SHELLED AND GRADED.	Days to Mature	${\rm J}_4$ bu.	Bu.	4 bu. or over	the Ear, Crated Boxed, per bu.				
Disco-Pride, Improved strain of Brown County Yellow Dent "Stock seed" from Montana and Northern South Dakota.	85	\$0.75	\$2.50	\$2.25	d. P				
Northwestern Dent, Standard Variety. Early Selection	85	.85	2.75	2.50	Boxe Boxe				
"Stock seed" from North Dakota and Central Minnesota.	0 =	.75	9.50	0.05	5 5				
Minnesota No. 23, Earliest recommended by Minnesota Exp. Sta. "Stock seed" from Minnesota and South Dakota.	85	.40	2.50	2.25					
Disco 85-Day White, Improved strain of Payne's White Dent	85	.75	2.50	2.25					
"Stock seed" from Northern South Dakota. Disco 90-Day White, Disco-White Dent of 1913	9.0	.75	2.50	2.25	\$3.00				
Bred and grown in the vicinity of Mitchell, S. D.					,				
Disco 100-Day White, Acclimated S Iver King	100	.75	2.50	2.25					
Rustler White Dent, South Dakota strain	90	.75	2.50	2.25	3.00				
Grown near Mitchell, S. D. Minnesota No. 13, Minnesota Experiment Station strain	9.0	.75	2.50	2.25	3.00				
"Stock seed" grown in Central Minnesota.		. ()	2,30	2.20	3.00				
Disco-Murdock, Improved strain of Early Murdock	100	.75	2.50	2.25	3.00				
Bred and grown in the vicinity of Mitchell. S. D. Riverview Special	100	.75	2.50	2.25					
Bred and grown near Mitchell. S. D.									
Gehu Flint, Earliest flint variety "Stock seed" grown in North Dakota.	80	.90	3.00	2.75					
Disco Squaw Corn, All colors of rainbow	85	.90	3.00	2.75					
"Stock seed" grown in Central South Dakota. Disco Amber Flint, a very productive early variety		.85	2.75	2.50					
Bred and grown near Mitchell, S. D.		.00	2.10	2.00					
Second Grade Seed Corn. Make first and second choice of above		0.0	1	1 50					
varieties, as stocks are limited		$.60 \\ .50$	$\frac{1.75}{1.25}$	$\frac{1.50}{1.10}$					
Medium Fodder Corn, Early to medium varieties, 6 to 8 ft		.50	1.25	1.10					
Early Sweet Fodder, Fine for early feed		$.70 \\ .65$	$\frac{2.00}{1.75}$	$1.75 \\ 1.50$					
Evergreen Sweet Corn, Choice stock for field or garden		.90	2.75	$\frac{1.50}{2.50}$					

Explanation of Terms Used Above

"STOCK SEED." Seed especially bred and selected with extra care from which seed is to be grown for sale. The source of "stock seed" from which your seed is grown is very important. We give source of our "stock seed" in above table. Most of our seed for sale is grown near Mitchell, S. D.

ON THE EAR. Only where price on the ear is given will seed corn be sold in this way. SHELLED AND GRADED—The commercial grading consists in removing the poor shaped kernels, the small tip kernels and large butt kernels, leaving one good grade of seed corn.

DAYS TO MATURE-We give here merely for comparison the approximate number of days required for these varieties to mature good corn under favorable conditions in South Dakota.

Bags are included at these prices.

Dwarf Essex Rape

PRICES—Pound, postpaid, 25 cents. By express or freight at purchaser's expense—5 pounds, 60 cents; 10 pounds, \$1.00; 25 pounds, \$2.25; 100 pounds or over at \$8.00 per 100 pounds.

Sorghum

	LD.		By Express or Freight			
Variety	Postpaid	1 lb.	5 lbs.	10 lbs.	50 lbs.	100 lbs.
Amber Cane, for forage	\$0.25	\$0.15	\$0.40	\$0.70	\$2.00	\$3.50
Kaffir Corn, for grain or forage	.25	.15	.35	.60	1.50	2.50

We are one of the largest growers and shippers of millet in the Northwest and are in a position to furnish you the best seed that can be produced. Prices are subject to change without notice

without notice.	weignt			Sack or	4 Sache	
Variety	per Bu.	¼ Bu.	Bu.	2 1/2 Bu.	per Sk.	
Selected Kursk	50 lbs.	\$0.60	\$1.75	\$3.75	\$3.50	
Diseo Kursk No. 1						
Siberian	50 lbs.					
German, South Dakota grown	50 lbs.	.60	1.75	3.50	3.25	
Japanese	36 lbs.	.50	1.50	3.25	3.00	
Early Fortune or other broomcorn varieties available.	50 lbs.	.60	1.75	3.75	3.50	

Full descriptions of Field Corn, Rape, Sorghums and Millet are given on pages 1 to 16.

